A1A File Number 16E

W-W

CASEMENTS

FOR ALL TYPES
OF BUILDINGS



WILLIAMS & WILLIAMS

PRODUCTS CORPORATION

326-28 EAST 44th STREET • NEW YORK 17, N. Y.

W-W

WILLIAMS & WILLIAMS PRODUCTS CORP.

326-28 EAST 44th STREET, NEW YORK 17, N. Y.

DISTRIBUTORS IN ALL PRINCIPAL CITIES THROUGHOUT THE UNITED STATES

W-W Casement products are a recognized standard of quality — made by long experienced craftsmen with a background of one hundred years of window design and construction. The finest examples of architecture throughout the world wherein W-W Casement products are installed signify their acceptance in the construction field.

RESIDENCE CASEMENTS



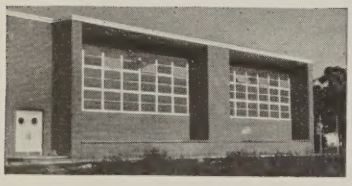
These casements are made of light type hot rolled Zee sections, with completely welded construction, stout extension hinges, bronze hardware and corrosion resisting accessories presenting a low-cost window suitable for all types of residences, apartments and housing projects.

INTERMEDIATE CASEMENTS



Intermediate Casements are made in three types; Side hinged Casements, Casement Combination wherein side hinged casements are combined with projected in-opening sill vents and the Casement Projected wherein the vents may be either in or out projecting or a combination of both. This window is especially suited for use in churches, schools, office buildings, public or institutional buildings where a high degree of expert craftsmanship is required to build windows to fit particular architectural requirements.

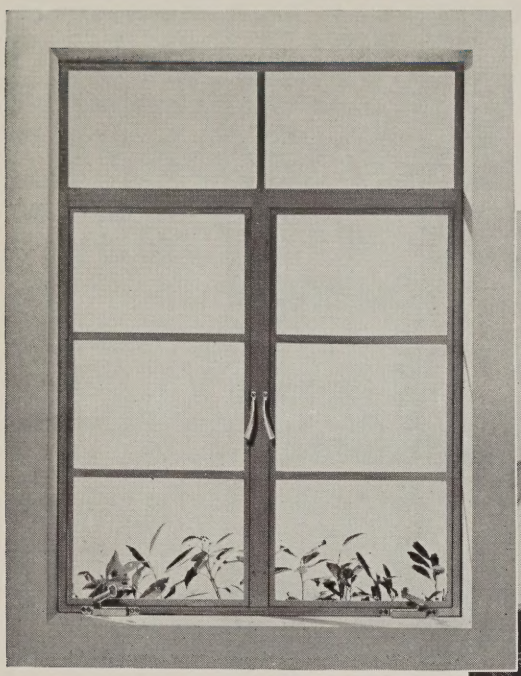
SPECIAL WINDOWS



Architectural design ofttimes demands special windows of particular design. W-W Special Casements meet this demand as they may be furnished in a section of weight suitable for any need and may be made to any design in any type of operation. Special hardware or concealed mechanical operators may be supplied.

BRONZE AND ALUMINUM WINDOWS

W-W windows of Bronze and Aluminum are made of heavy sections to meet the most exacting requirements. These are "purpose built" windows, architecturally correct, for use in all buildings, both for interior or exterior needs, where design demands a more ornamental type of window.





Green Park Homes
Flushing, New York

SPECIFICATIONS

GENERAL: All windows where so indicated on the plans or called for in the specifications shall be W-W Residence Casements as manufactured by Williams & Williams Products Corp. of New York, N. Y.

MATERIAL: Window members shall be hot-rolled sections of new billet mild steel of Zee bars having a depth of 1" and a web thickness of not less than 1/8".

CONSTRUCTION: The corners of frame and vent shall be mitred, electrically flash welded and ground smooth. Muntins shall be Tee sections fitted to frame and/or vent members by means of mortise and tenon joints, air hammer riveted. Muntin intersections shall be of interlocking design. Hinges shall be of the Extension Cleaner Type with an angle shaped frame arm projection welded to frame section. The vent arm shall be a special hot-rolled member riveted to the vent section. The two arms shall be assembled with a solid brass pivot pin. Double contact weathering shall be provided around the entire periphery of the vents.

HARDWARE: Equip each vent with a solid forged bronze locking handle and a Roto Sill Operator. The guide channels for the Sill Adjuster shall be stainless steel spot welded to the vent section. A concealed keeper shall be provided, attached to vent in which the locking handle shall engage. Hardware shall be delivered to the job loose to prevent damage and loss.

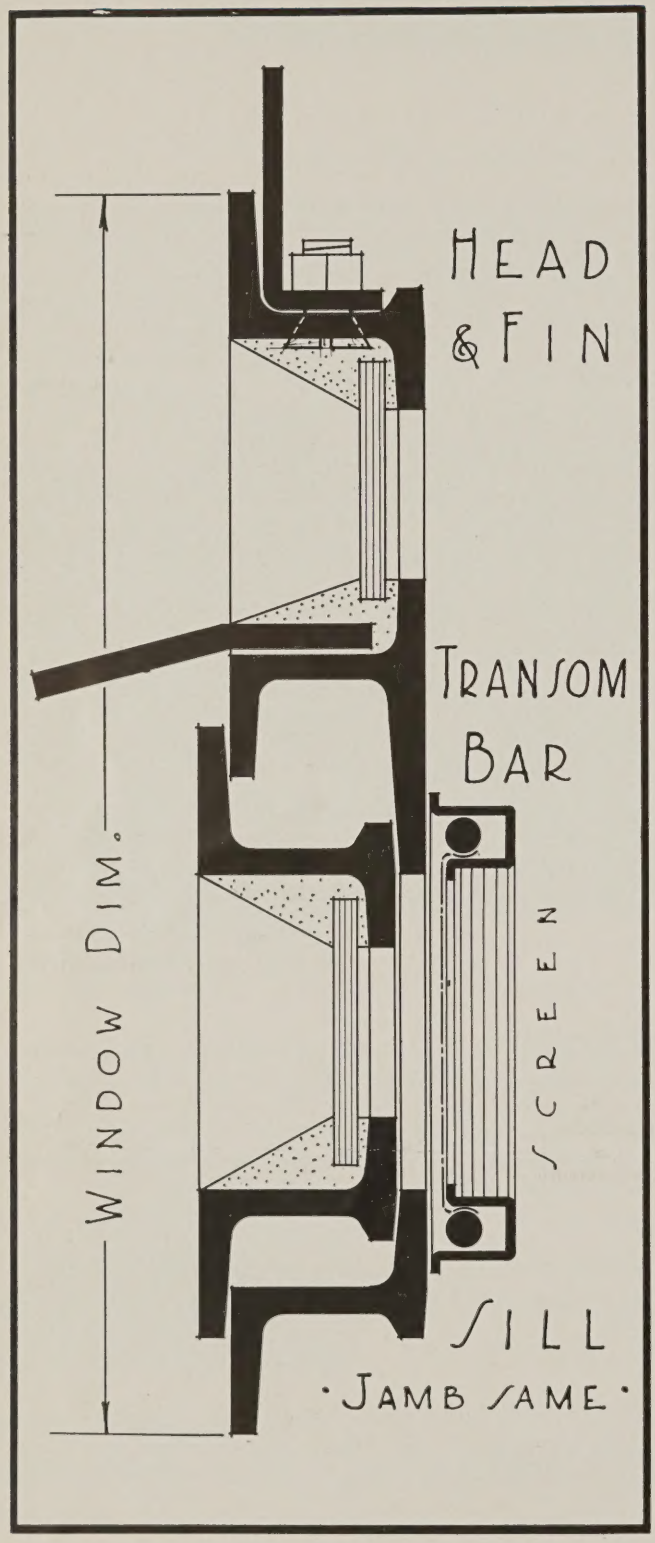
SCREENS: Each vent shall be fitted with a flat type fixed screen. Attachment shall be made with wing bolts and screens shall be easily removable. Screen frames shall be of formed electro-galvanized steel and shall be given one shop coat of Gray Bakelite Enamel, oven-baked. Frames shall be rewireable. Screen cloth shall be of 18 x 14 mesh commercial bronze wire.

SHOP PAINTING: All casements shall be cleaned free of rust and scale and given two coats of Alkyd Resin Synthetic Base Paint.

ADJUSTING: All vents shall be shop adjusted to insure proper weathering of vent. After setting and before glazing contacts should be inspected and field adjusting made if required.

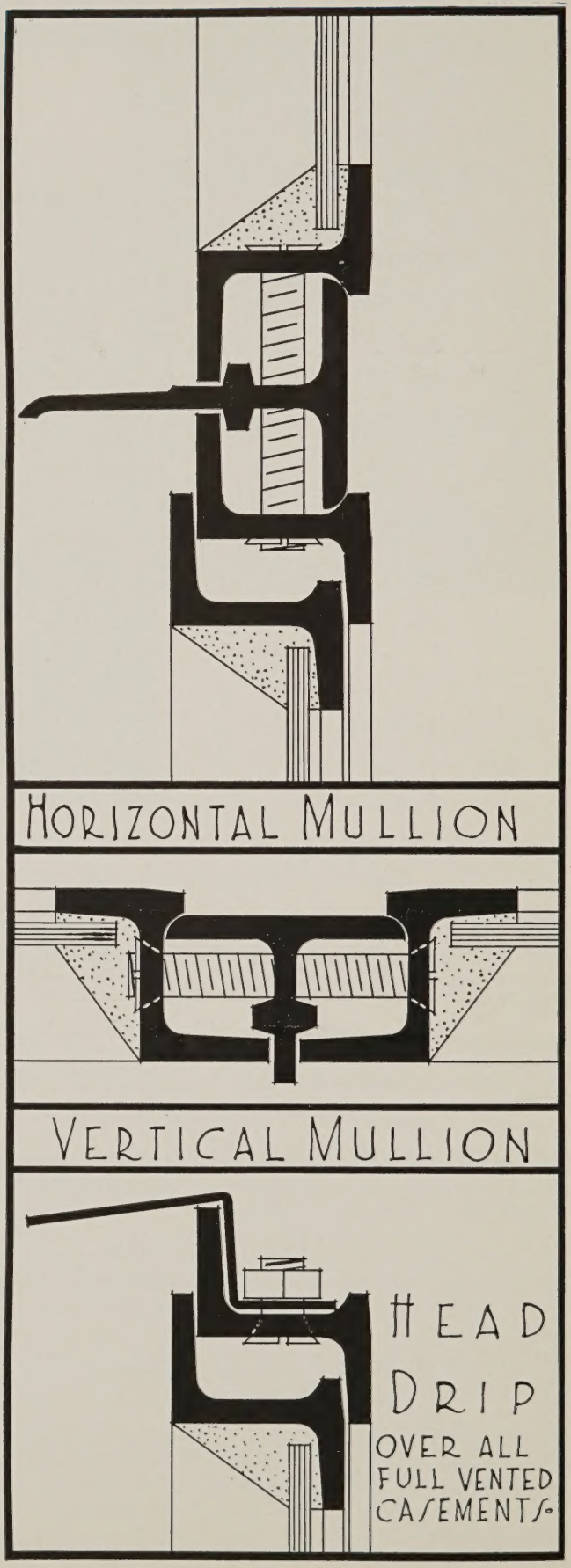
SETTING: All mullions or coupling bars shall be buttered along entire line of contact at time of setting. The periphery of all casements at line of wall contact shall be calked.

GLAZING: Casements shall be designed for outside glazing with spring clips and steel sash putty, furnished by others.



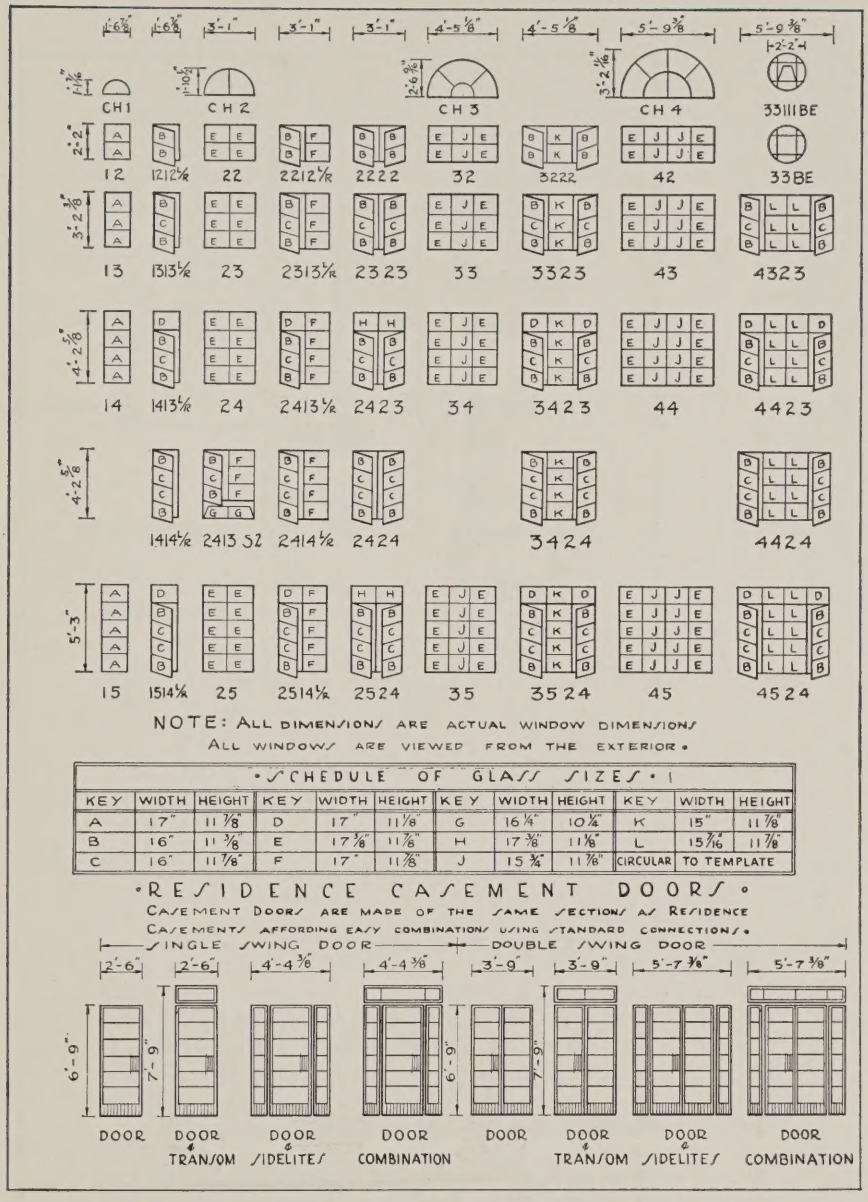
TYPICAL SECTIONS
OF W & W RESIDENCE
CASEMENTS

SCALE:
FULL SIZE



RESIDENCE CASEMENTS

STANDARD TYPES AND SIZES



NOTE: ALL DIMENSIONS ARE ACTUAL WINDOW DIMENSIONS
ALL WINDOWS ARE VIEWED FROM THE EXTERIOR.

SCHEDULE OF GLASS SIZES

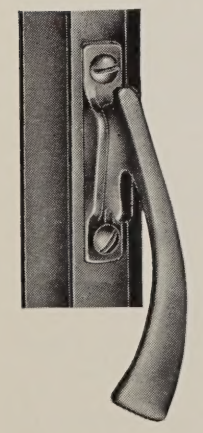
KEY	WIDTH	HEIGHT	KEY	WIDTH	HEIGHT	KEY	WIDTH	HEIGHT	KEY	WIDTH	HEIGHT
A	17"	11 7/8"	D	17"	11 1/8"	G	16 1/4"	10 1/4"	K	15"	11 7/8"
B	16"	11 7/8"	E	17 5/8"	11 7/8"	H	17 7/8"	11 1/8"	L	15 7/16"	11 7/8"
C	16"	11 7/8"	F	17"	11 7/8"	J	15 3/4"	11 7/8"	CIRCULAR	TO TEMPLATE	

RESIDENCE CASEMENT DOORS

CASEMENT DOORS ARE MADE OF THE SAME SECTIONS AS RESIDENCE CASEMENTS AFFORDING EASY COMBINATIONS USING STANDARD CONNECTIONS.

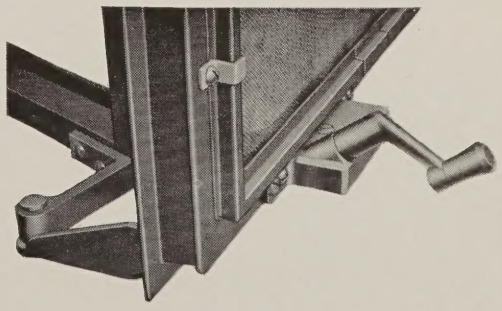
SALIENT FEATURES

1. Heavy hot rolled steel section, full 1" in depth and 1/8" in web thickness.
2. Pre-heated flash welds at all mitred corners assure perfect fusion of metals resulting in great strength.
3. The heaviest and most efficiently designed cleaner extension hinge on any Residence Casement. Hinge assembly consists of an angle arm extended through the frame member and projection welded; the vent arm is a special hot rolled section 1/4" thick riveted to the vent section; the two arms are assembled with a brass pivot pin that is non-corrosive — assuring perfect operation.
4. Two shop coats of Alkyd Resin Synthetic Base Paint provide protection against corrosion and offer a hard base for finish painting.
5. Solid Bronze Locking Handles — appearance improves with use.
6. Stainless Steel non-corroding Guide Channels for Roto operator. Spot welded to section — no screws to loosen or corrode.
7. Galvanized Steel Fins—mill galvanizing gives protection against corrosion. Fins are within the wall and are subject to corrosive action of lime, moisture, etc. Zinc coating protects the metal.
8. Insulated Extruded Aluminum Coupling Bars — no corrosion of part that cannot be painted after installation.



ROTO HANDLE

The Roto locking handle is of the "through-section" type which when the ventilator is closed engages a keeper that secures the ventilator by positive cam action. This handle is used with the Getty under-screen adjuster.



EXTENSION HINGE AND ROTO SILL ADJUSTER

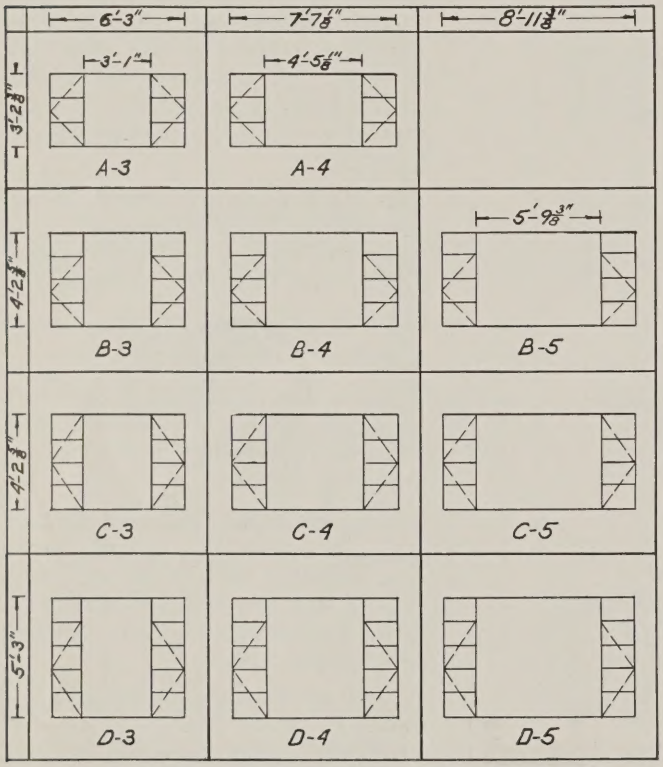
The W & W extension hinge is without equal. The angle hinge arm projection welded to the frame bar and the solid steel riveted ventilator arm are assembled with a solid brass pivot pin and act together to maintain the ventilators in proper position and assure permanent weathering.

STANDARD PICTURE WINDOWS

W & W are the originators of this modern Window.

Present day design demands large glass areas and maximum ventilation. Picture Windows as developed by W & W provide the means for opening up wall spaces to obtain spaciousness of view.

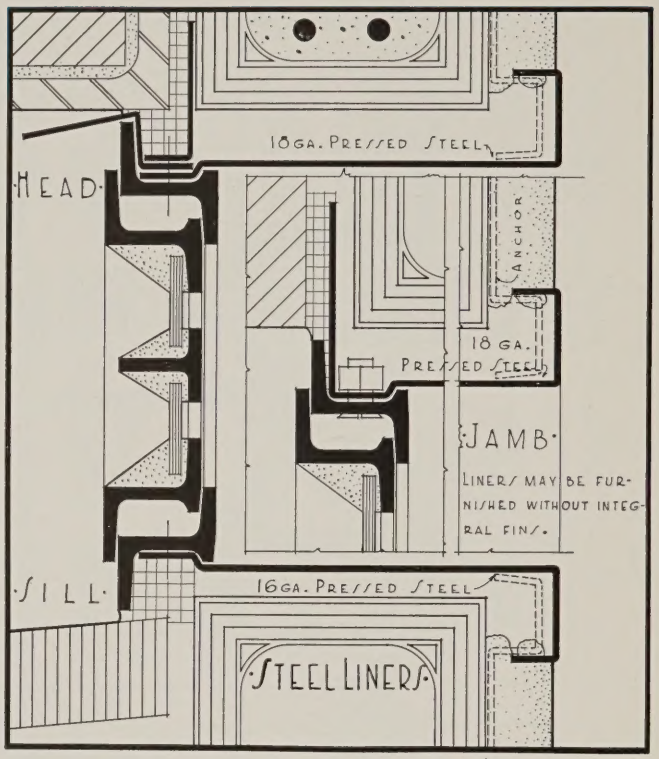
Williams & Williams Picture Windows are also made in heavier and deeper sections for glazing with Thermopane or Twindow.



ALL CASEMENTS ARE SIDE-HINGED TO SWING OUT.



Barricini Residence, Scarsdale, N. Y.
Simon B. Zelnik, Architect.



SCALE:
HALF FULL SIZE

STEEL LINERS

Williams & Williams Residence Casement Liners provide an economical manner of trimming and finishing the interior reveals of the window opening. Of flush type design, the head and jamb members are of 18 ga. steel and the sill of 16 ga. They are designed with extending tongues that fit into slots in adjacent members for easy and quick assembly on the job. They may also be factory assembled with the casement shipped as a package at a slight extra cost.

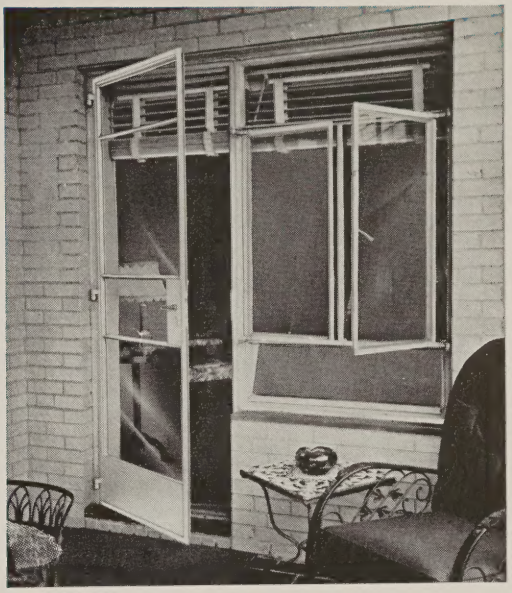
They lend themselves to building in as the construction proceeds thereby effecting a great saving by completing the filling and finishing of the entire opening in one operation.

Plaster bond holes are provided in the returns of the liner to insure against cracking and the liner is anchored to the wall with specially designed clips which hold the frame rigidly in place.

Steel Liners are made in two standard depths—4½" and 5¼"—they may be furnished, however, in other depth dimension to fit particular requirements.

Liners may be furnished of Aluminum. All surfaces of the Aluminum coming in contact with steel are insulated.

INTERMEDIATE CASEMENT DOORS, SIDELIGHTS AND TRANSOMS



Apartment Terrace, 945 Fifth Ave.
Emery Roth & Sons, Architects

W-W Casement doors are made of specially designed hot-rolled steel sections that provide two point weathering. The two standard sizes provide a single door 2′-6″ in width and the double door 3′-9″ in width with a height of 6′-9″.

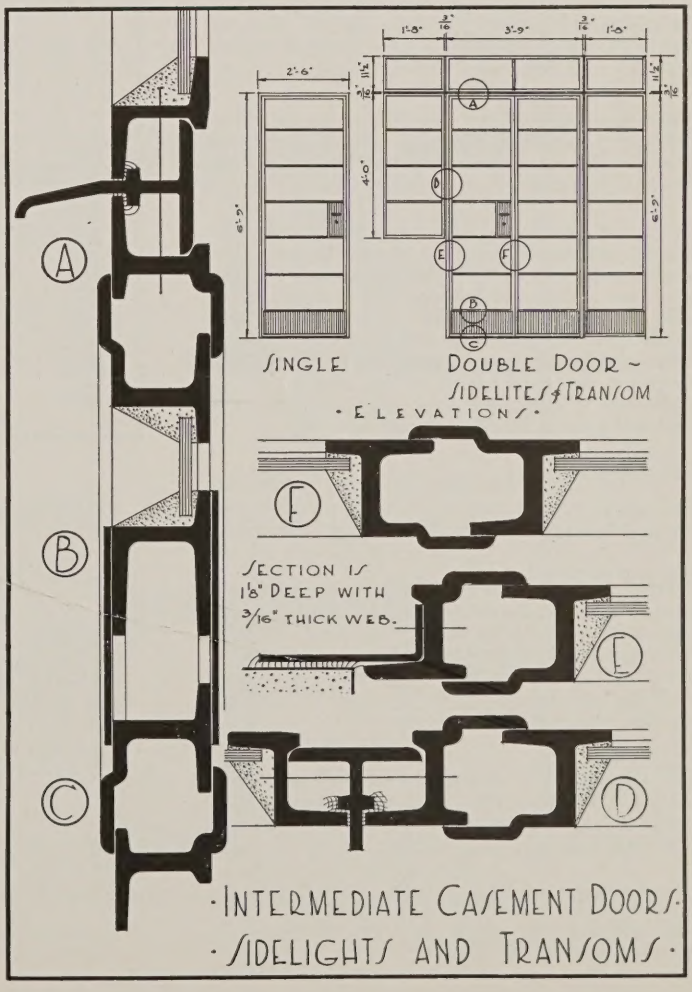
The outer frame member is of such design that it may be coupled with either the W-W Residence Casement or the Intermediate (Universal Section) Casement. Kick Plates of #18 ga. steel are provided in the lower panel of the doors.

The double leaf doors are fitted with top and bottom lock bolts on the inactive leaf. The active leaf is provided with a mortise lock which can be operated from inside or outside. Manganese brass lever handles, escutcheon plates and duplicate steel keys are provided. Single doors are fitted with a mortise lock and lever handles the same as the double doors. The doors are hung on heavy knuckle type hinges of steel.

Each door is provided on the outside with a galvanized steel eye and hook at the level of the top of the kick plate panel.

Full length side lights with kick plates are carried in stock as well as transom lights which may be either fixed or vented.

SCALE:
HALF FULL SIZE



SPECIFICATIONS

GENERAL: All windows where so indicated on plans and called for in the specifications shall be Intermediate Casements, (Intermediate Combination, Intermediate Projected), as manufactured by Williams & Williams Products Corp. of New York, N. Y.

MATERIAL: All members shall be of hot-rolled, new billet, mild steel designed to provide two point weathering contacts of at least ¼". All shapes shall be specially designed for casement construction. The combined weight of frame and vent members shall be not less than 3.57 pounds per lineal foot.

CONSTRUCTION: The mitred corners of frames and vents shall be electrically welded and ground smooth. Muntins of Tee section shall be welded to frame or vent members. Casements shall be designed for outside glazing with angle clips and glazing compound. Prepare all windows for proper hardware.

Roto Type side-hinged ventilators shall be fitted with specially designed forged steel extension hinges, welded to both frame and vent. Hardware to consist of Solid Bronze Locking Handle and Roto Sill Adjuster. Provisions shall be provided for flat fixed screens. (Vent area limit is 10 sq. ft. Three hinges and double locking hardware is required on all vents over 5'-0" in height.)

(Where Simplex Type casements are specified friction type hinges are used with solid bronze cam locking handle and strike. Area limits same as for Roto type.)

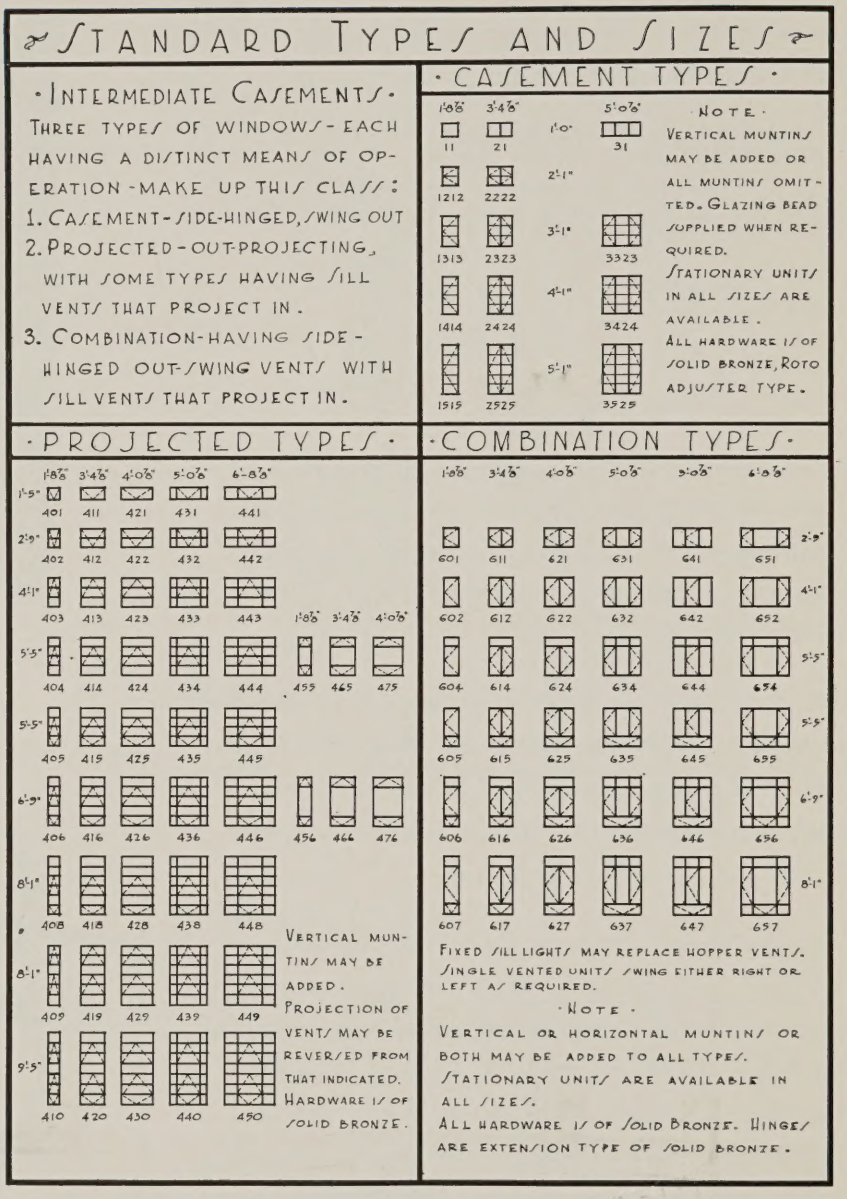
Projected Ventilators shall be fitted with two heavy steel arms riveted to frame and vent. Vents shall be equipped with sliding spring, floating pivot assemblies and bronze shoes that will maintain uniform tension to allow vent to hold open in any position. The vents will be fitted generally with solid bronze cam locking handles, on "within reach" vents and spring catches and pole rings on others. Where screens are required vents may be fitted with under-screen push-bars.

PAINTING: Windows shall be bonderized and given a shop coat of rust inhibitive paint, oven baked one hour at 300 degrees Fahrenheit.

SCREENS: Windows shall be prepared for proper screens. Screen clips shall provide easy means for screen removal. Screen frames shall be electro-galvanized steel of rewireable design with steel splines. Frame shall be given one coat of Bakelite enamel baked-on. Screen cloth shall be bronze wire woven 18 x 14 mesh.

ERECTION: Manufacturer shall erect and adjust all windows. Set plumb and true and firmly anchored in opening. Bed all frames in mastic. Calking shall be done by others.

GLAZING: Windows are designed for outside glazing with angle clips and glazing compound, furnished by others.



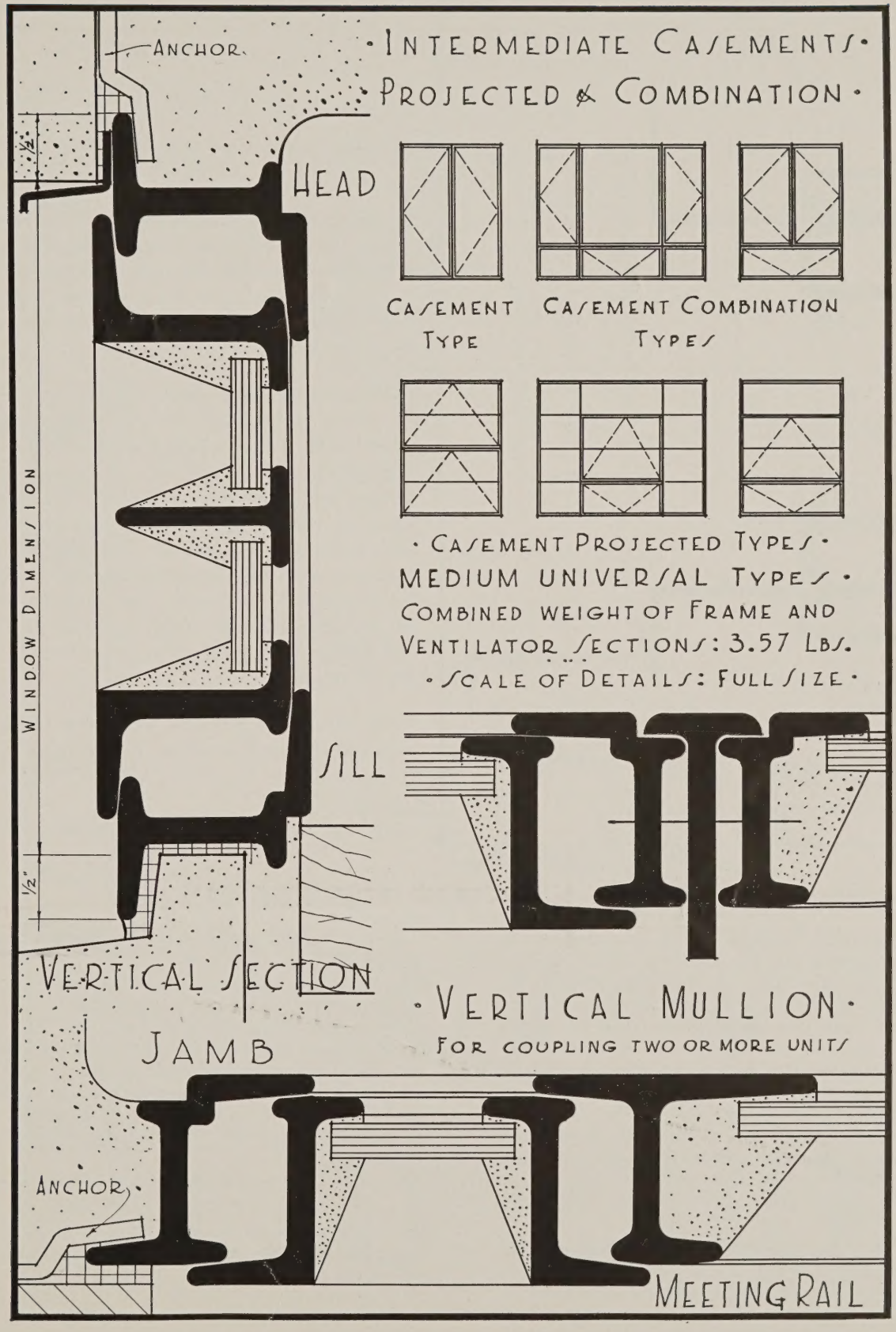
INTERMEDIATE CASEMENT PROJECTED AND COMBINATION

The Intermediate Casement Projected and Combination Casements are made with the Medium Universal Section. The projected vents are fitted with heavy steel projection arms; sliding friction pivots consisting of a bronze shoe and an adjustable floating spring pivot pin that permits ready adjustment of the friction pressure insuring ease of operation. Sight lines are maintained on all projected windows where vents and fixed lights occur at the jambs. This gives a clean straight line and eliminates unsightly offsetting of glass lines.

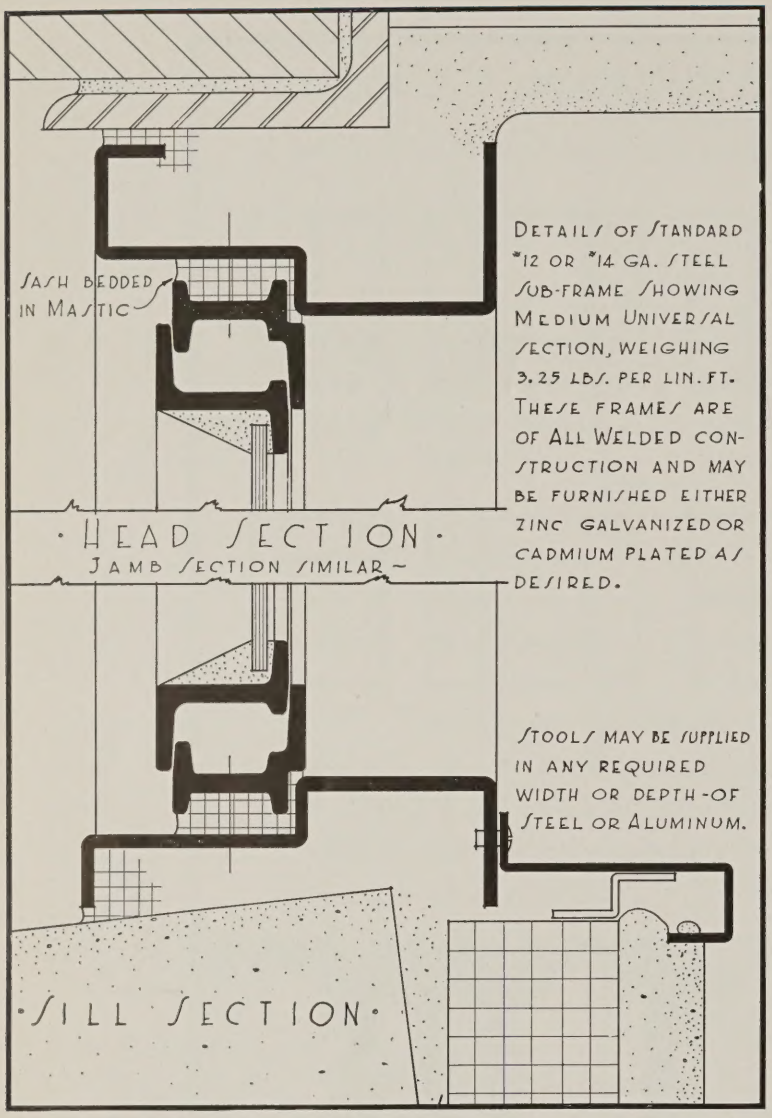
Intermediate Casement Projected and Combination Casements are fitted with solid bronze hardware of design to suit operating condition. Where vents are screened the vents are fitted with push bar hardware which does not interfere with the application of the screen.

Stops and/or cheeks may be fitted to the hopper or in-opening vents to limit the degree of opening.

INTERMEDIATE CASEMENTS • (Medium Universal Section)



SCALE:
FULL SIZE



STANDARD STEEL SUB-FRAMES

Standard steel sub-frames for use with Intermediate Casements are made in either #12 or #14 gauge steel to provide a frame for the window where architectural design requires such treatment. These frames may be zinc galvanized or cadmium plated for protection against corrosion.

Sub-frames for single units of casements are made in one piece construction with all corners coped and solidly welded. Where long runs of frames are required in multiple unit openings the sub-frames are made in sections not longer than 10 feet and are assembled by means of splice plates and interlocking members. W-W Sub-frames are constructed with the sill and head members continuous with intermediate mullions fitted between so that there are no openings in the head or sill members through which moisture can enter. All end sections are integral in construction and completely welded.

Stools may be supplied in any width or depth when required and may be either steel or aluminum.

SCALE:
HALF FULL SIZE

WILLIAMS & WILLIAMS "SPECIAL" CASEMENTS

The W-W "Special" Casement is purpose-made to fit particular requirements of architectural treatment. Made to any size or design it is a perfect window for use in churches, public and institutional buildings and other edifices requiring the highest type of craftsmanship.

The sections used in the fabrication of these windows are hot-rolled steel of special design furnishing positive weathering contacts at two points. The combined weight of the sections is 3.97 pounds per lineal foot with a frame section that allows 5/8" projection into the wall... providing a perfect weather baffle at the periphery of the opening and a broad surface for calking.

It is designed for outside or inside glazing with glazing compound or glazing beads. Vents may be either in or out-opening in side-hinged or projected operation.

Ventilators may be pivoted at center, top or bottom as is required for church windows... the pivot is cup type of brass and may be either friction or non-friction type. Mullions for coupling may be either special plate or Tee type. When the Tee type is used the frame section used is the equal leg type.

The hardware used on these windows are specially designed by "Getty". Pleasing in design and heavy in weight they assure positive operation. The hardware is of bronze, standard in Statuary finish but special finishes will be supplied at slight extra cost. Due to the weight of the section vents may be as large as 7'-0" high and 2'-0" in width and may be fitted with Cremorne bolts or special concealed mechanical operating hardware.

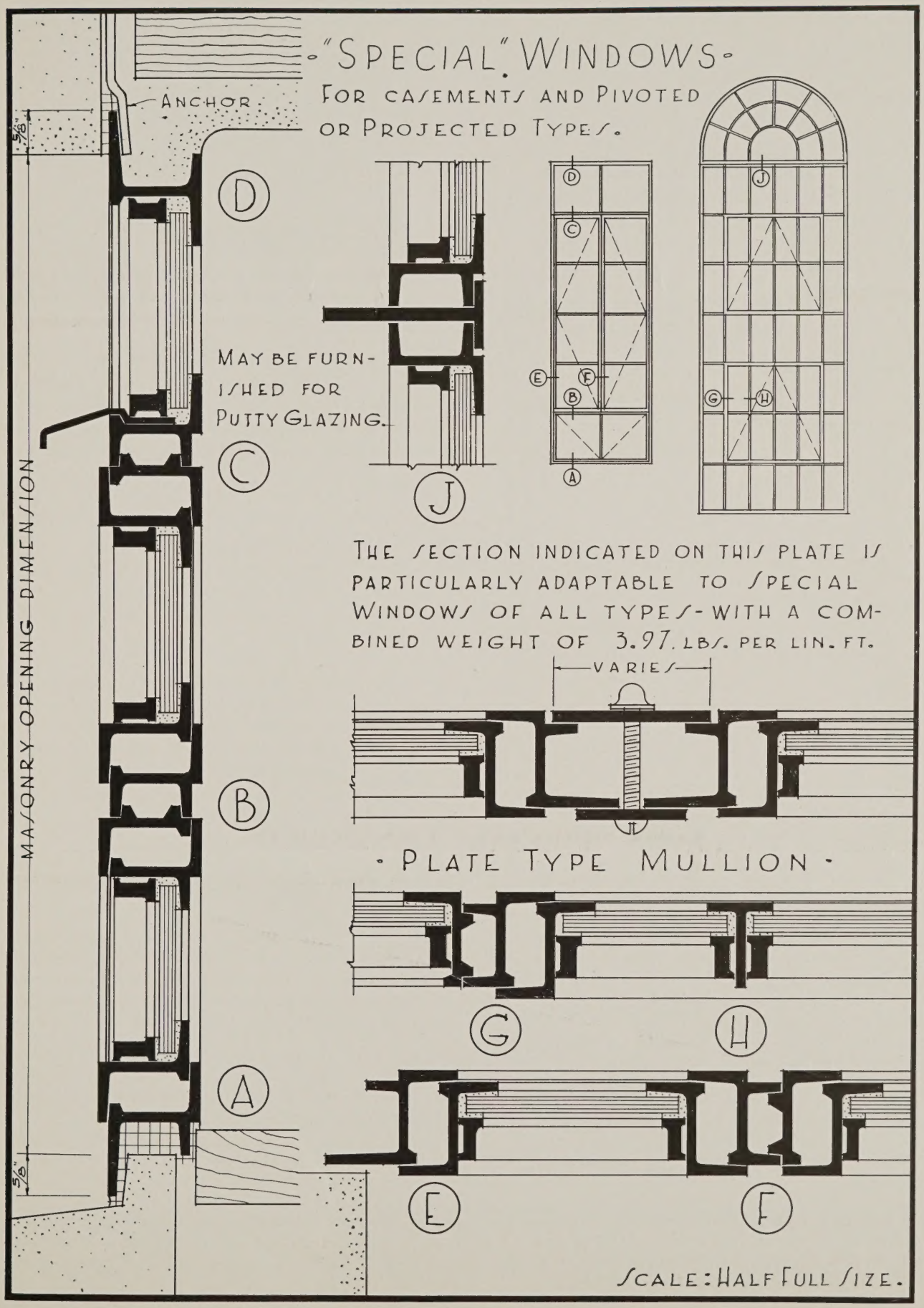
A special adapter section permits of much freedom in the vent design as indicated by the details.

These windows are given a shop coat of W-W Formula Rust-Inhibitive paint that serves as a fine hard bond surface for finish coats of paint.

Where architectural design calls for special head conditions such as semi-circular, camber, oval, pointed arch, tri-foil, quatra-foil or other special conditions this W-W "SPECIAL" window fills all architectural requirements.

AVERY LIBRARY

W-W



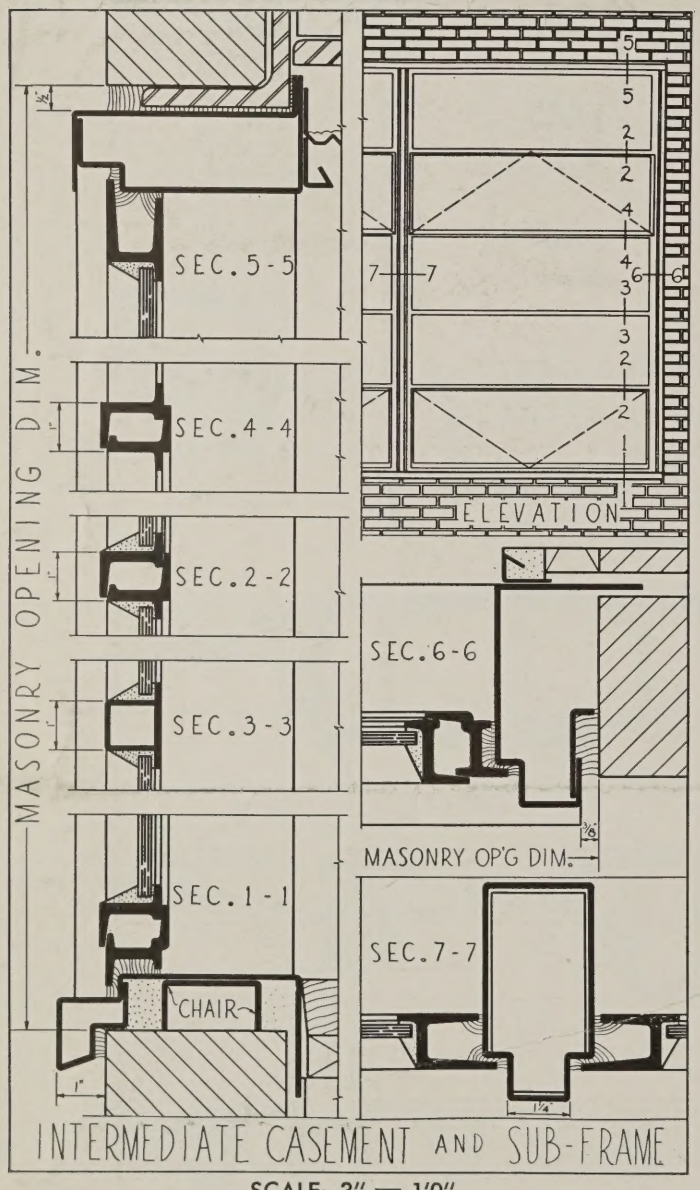
SCALE:
HALF
FULL SIZE

AVERY CLASSICS AT 8805 W72 196-8

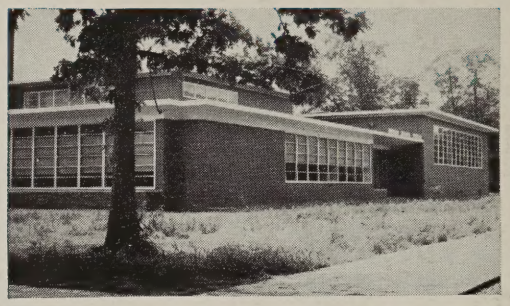
W-W SCHOOL WINDOWS AND SUB-FRAMES

Modern school planning and design calls for special types of windows incorporating large glass areas and efficient means of ventilation control.

The standards of school design have changed radically from one of compact, multi-storied design to a spread and rambling scheme that permits of greater freedom of fenestration. Long lines of windows have replaced unusable wall areas permitting more effective distribution of daylight.



SCALE: 3" = 1'0"



Martin Avenue School, North Bellmore, N. Y.
Frederick P. Wiedersun, Architect.

Whether architects designs have direct one wall daylighting or bilateral lighting incorporating clerestory or monitor windows in conjunction with sidewall lighting there is a W-W School Window that will carry out correctly the intentions of the Architect's design.

W-W School Windows of Medium Universal Sections may have projected awning type, pivoted or side hinged vents and are furnished either as single or multiple units or with pressed steel sub-frames in unlimited runs. W-W School Windows are heavy in section, completely welded and are fitted with solid bronze hardware.

Sub-Frames of #14 or #12 gauge steel present an economical means of framing openings into which the windows can be installed. These sub-frames are built in the wall and obviate the necessity for early installation of the windows with the probable damage to same. Windows are placed in the sub-frames after the entire wall is complete.

To prevent possible corrosion, sub-frames as well as windows may be furnished with a Zinc Galvanized or Cadmium Plated finish. The plating is done after fabrication and assembly so that all welds are galvanized. No galvanized sheet is used or recommended, welding destroys the coating so that no protection is gained as moisture will enter under the coating and progressive corrosion will take place.

There are no standard designs for either windows or sub-frames as W-W School Windows are custom-built to fit particular architectural requirements.

WILLIAMS & WILLIAMS PRODUCTS CORP.
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